

AMENDMENTS TO CLAIMS:

The listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A character string data processing method for passing a first character string from a first object, through an interface object running under control of a computer operating system, to a second object, when an application program is run, the method comprising:

casting, in the interface object, the first character string declared as a first data type as a basic string data type, whereby the number of characters including null data in the first character string is countable irrespective of the declared type of the first character string, detecting an effective number of characters in the first character string by analyzing its basic string data type representation, and converting the effective number of characters in the first character string to a second character string that can be passed by the operating system to the second object, without using binary conversion to convert the first character string to a special format; and

processing, in the second object, the second character string, which is declared as the first data type, as a basic string data type, irrespective of the declared type of the second character string.

2. (Previously Presented) The method of claim 1, wherein the basic string data type representation of the first character string contains string length information.

3. (Previously Presented) The method of claim 1, wherein

the application program can process a character string containing null data;

the first object is the application program or a peripheral device class control object; and

the second object is a peripheral device class control object or a peripheral device service object.

4. (Previously Presented) The method of claim 3, wherein the character string is bar code data.

5. (Original) The method of claim 3, wherein the application program is a POS application program.

6. (Currently Amended) A character string data processing system having a processor, comprising a first object that is a client object, a second object that is a server object with respect to the first object, and an interface object for passing a first character string from the first object, through the interface object, to the second object running an application program, wherein:

the interface object comprises means for casting the first character string declared as a first data type as a basic string data type, whereby the number of characters including null data in the first character string is countable irrespective of the declared type of the first character string, means for detecting an effective number of characters in the first character string by analyzing its basic string data type representation, and means for converting the effective number of characters in the first character string to a second character string that can be passed by the operating system to the second object, without using binary conversion to convert the first character string to a special format; and

the second object comprises means for processing the second character string, which is declared as the first data type, as a basic string data type, irrespective of the declared type of the second character string.

7. (Previously Presented) The system of claim 6, wherein the basic string data type representation of the first string contains string length information.

8. (Previously Presented) The system of claim 6, wherein

the application program can process a character string containing null data;

the first object is the application program or a peripheral device class control object; and

the second object is a peripheral device class control object or a peripheral device service object.

9. (Previously Presented) The system of claim 8, wherein the character string is bar code data.

10. (Original) The system of claim 8, wherein the application program is a POS application program.

11. (Previously Presented) A computer-readable medium carrying an object program that is a client object when an application program is run, the object program comprising:

instructions for passing first character string to a server object relative to the client object by invoking an interface object capable of passing the first character string through an operating system to the server object; and

wherein the passing instruction has an executable command for running a process invoking the interface object to cast the first character string declared as a first data type as a basic string data type, whereby the number of characters including null data in the first character string is countable irrespective of the object-declared type of the first character string, the passing instruction further having instructions for detecting an effective number of characters in the first character string by analyzing its basic string data type representation, and converting the effective number of characters in the first character string to a second character string that can be passed by the operating system to the server object, without using binary conversion to convert the first character string to a special format.

12. (Previously Presented) The computer-readable medium of claim 11, wherein the object program is an application program capable of processing a character string containing null data, or a peripheral device class control object.

13. (Previously Presented) The computer-readable medium of claim 11, wherein the first character string is bar code data, and the application program is a POS application program.

14. (Currently Amended) A computer-readable medium carrying an object program that is a server object when an application program is run, the object program comprising:

an executable command for casting a first character string, passed to the server object from a client object thereof through an interface object running on an operating system, declared as a first data type, as a basic string data type, whereby the number of characters including null data in a middle portion of the first character string is countable irrespective of an object-declared type of the first character string, and processing the effective number of characters in the first character string determined from an analysis of its basic string data type representation, wherein the effective number of characters was obtained as a result of a non-binary conversion.

15. (Original) The computer-readable medium of claim 14, wherein the object program is a peripheral device class control object, or a peripheral device service object.

16. (Previously Presented) The computer-readable medium of claim 14, wherein the first character string is bar code data, and the application program is a POS application program.

17. (Previously Presented) A computer-readable medium carrying an interface object program for passing a first character string through a computer operating system from a client or first object to a server or second object when an application program is run, the interface object program comprising:

an executable command for casting the first character string declared as a first data type as a basic string data type, whereby the number of characters including null data in the first character string is countable irrespective of the declared type of the first character string of the first object, detecting an effective number of characters in the first character string by analyzing its basic string data type representation, and converting the effective number of characters in the first character string to a second character string that can be passed by the operating system to the second object, without using binary conversion to convert the first character string to a special format.

18. (Previously Presented) The computer-readable medium of claim 17, wherein the basic string data type representation of the first character string contains string length information.